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The Hunter-self: Perforations, Prescriptions, and Primordial Beings among the Jotĩ, Venezuelan Guayana

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INTRODUCTION

Hunting practices among native lowland South American peoples have been discussed and analyzed in numerous published studies. These studies reflect diverse descriptive, theoretical, and methodological priorities, and they leave no doubt about the central role of hunting activities among Amerindian groups in the area (Beckerman 1980; Carneiro 1974; De Souza-Mazurek, et al. 2000; Hill and Hawkes 1983; Hill and Padwe 2000; Linares 1976; Lizarralde 2007; Mena et al. 2000; Ross 1978; Vickers 1984; Yost and Kelley 1983; Winter 2002). This essay is an ethnographic exploration of the poetics of reproducing the self and life through hunting among the Jotĩ, a group of about 900 persons who live along the slopes and intermountain valleys of the Sierra Maigualida in the Amazonas and Bolívar states of the Venezuelan Guayana (see E. Zent and S. Zent 2004 for detailed ecological and floristic descriptions of the Jotĩ area). The interconnections of humanity and the biosphere with the cosmos and the supernatural are explored here in interpretive and practical terms. In addition, notions of personification, socialization, and spiritualization in Jotĩ conceptualization, which provide the central logic for understanding their hunting practices, are examined.¹ The article follows the theoretical lead of previous scholarship (e.g., Århem 1996a; Descola 1986, 1996; Hornborg 1996; Reichel-Dolmatoff 1971; Rival 1996, 1998; Taylor 1993, 1996; Viveiros de Castro 1992) and treats hunting ideology as an empirical example of how conventional Cartesian analytical dichotomies (for example, culture/nature, mental/material) are inadequate for understanding and explaining the ideology and praxis of lowland South American groups. My analysis of the logical operation of Jotĩ hunting practice is informed by recent theoretical arguments (Århem

1996a, 1996b; Descola 1986, 1996; Ingold 2000; Taylor 1993, 1996; Viveiros de Castro 1979, 1992, 1998), especially in regards to three interrelated foci. First, humans and animals are ontologically equivalent (that is, they shared a life condition). Therefore, communication between them is not just possible but necessary, and hunting constitutes a complex system of management implying relational modes of predation and reciprocity (cf. Århem 1996a, 1996b; Descola 1986, 1996; Taylor 1996). Second, Jotí hunting has corporeal (in the sense of Viveiros de Castro 1979), behavioral, and symbolic markers that express a specific lifestyle (including praxis and ideology) that articulates most spheres of social dynamics. Third, Jotí hunting is a paradigmatic expression of nonspecialized shamanism. In a society where most men and many women are hunters, success in hunting is based not just on technical knowledge or skill but also on a hunter's capacity to communicate with a myriad of sentient beings and to adopt their viewpoints (cf. Taylor 1993, 1996; Viveiros de Castro 1992, 1998). These three aspects of Jotí hunting will be reviewed here.

This essay is part of a more comprehensive project concerning the ethnoecology of the Jotí initiated together by Stanford Zent and me in 1996 (for methodological details see López Zent and S. Zent 2004; E. Zent 1999; S. Zent and López Zent 2004). Data reported here comes from both verbal-intersubjective and behavioral-material records, which have been collected since 1996 in diverse Jotí communities. Around 175 Jotí (from Alto Cuchivero, Kayamá, Caño Iguana, Caño Majagua and Caño Mosquito) interacted with us in the specific domain of hunting by allowing us to: tag along with them in their hunting outings and to witness curare preparation; watch the fabrication of hunting tools and the collection of plants, mushrooms, or anthropods (including insects, crustaceans, spiders). They provided us with information and facts through interviews, spontaneous conversations, et cetera, related to hunting. When I refer to "the Jotí" in this text, I am referring to this sample of my consultants concerning hunting. Furthermore, my interpretation of Jotí hunting is based in data that represent the observed range of ecological and social diversity in terms of settlement patterns (nomadic, sedentary with camping); population (seven to about three hundred people); outside contact (isolated, infrequent, permanent); forest formations (ecotone, diverse montane humid evergreen, seasonally flooded forests); natural resources (dispersed, abundant, terrestrial, riverine, low/high density); and priority of ecological emphasis (hunting-gathering, agriculture). The verbal-intersubjective techniques include formal and contextualized interviews, social interactions, daily participant observation, and casual conversations. The behavior-material techniques were centered on: (1)

focal person follow-up observations (90 incidents) as described in S. Zent 1996; (2) general botanical collections (2500 samples in sets of five); and (3) geographic coordinate recording (GPS) of 1074 wild resource harvest events.

ELEMENTAL SUBSISTENCE PARAMETERS

The Jotĩ are settled in rather isolated natural and cultural environments, and are among the least contacted ethnic groups living in Venezuela today. Most Jotĩ are monolingual speakers of their own language, which is affiliated with the Salivan language family (Sanford Zent and Steve Bove, personal communication). The Jotĩ inhabit upland areas of the Sierra Maigualida (in northeastern of Amazonas and southwestern Bolívar states), removed from settlements of other indigenous groups, except for those in the Kayamá area, where their homeland borders that of the E'ñepa. Maigualida is a mountainous formation of rugged terrain that spreads across almost 7,000 kilometers, reaching its highest altitude at Cerro Yudi (2,400 meters above sea level [m asl]) and extending about 300 kilometers with an average width of 30 to 40 kilometers (Huber 1995:42). The entire mountain range is covered by dense and high forests (mostly pluvial, riverine, premontane, montane, and gallery forests), except above 2000 m asl where tepui flora prevails. Also present at lower altitudes are mosaics of small transitional formations of bushes, and flooded and nonflooded savannas.

Most of the twenty-five Jotĩ communities that have been censused maintain to a large degree their ancestral subsistence strategies, despite being exposed to varying degrees of contacts (with other Indians, criollos, scientists, missionaries, tourists, or soldiers), which has triggered disparate cultural change among them. Usually, the Jotĩ live in small, dispersed and isolated communities of about five to thirty-five people. They are organized in highly mobile, equalitarian, and impermanent groups with relaxed kinship rules (Storrie 2003). Even at the two more sedentary and nucleated mission settlements, the houses are located in neighborhoods occupied by bandlike groupings of related nuclear and extended families coming from the same territorial regions, which resemble the formerly dispersed groups in terms of size, economic cooperation, and kinship structure. Jotĩ subsistence ecology consists mostly of the hunting and gathering of wild resources, practiced in frequent camping (overnight foraging), and intermingled with an incipient shifting agriculture and some fishing. Their settlement pattern consists of temporary shelters during an annual cycle, although each group might retain a sort of base camp where

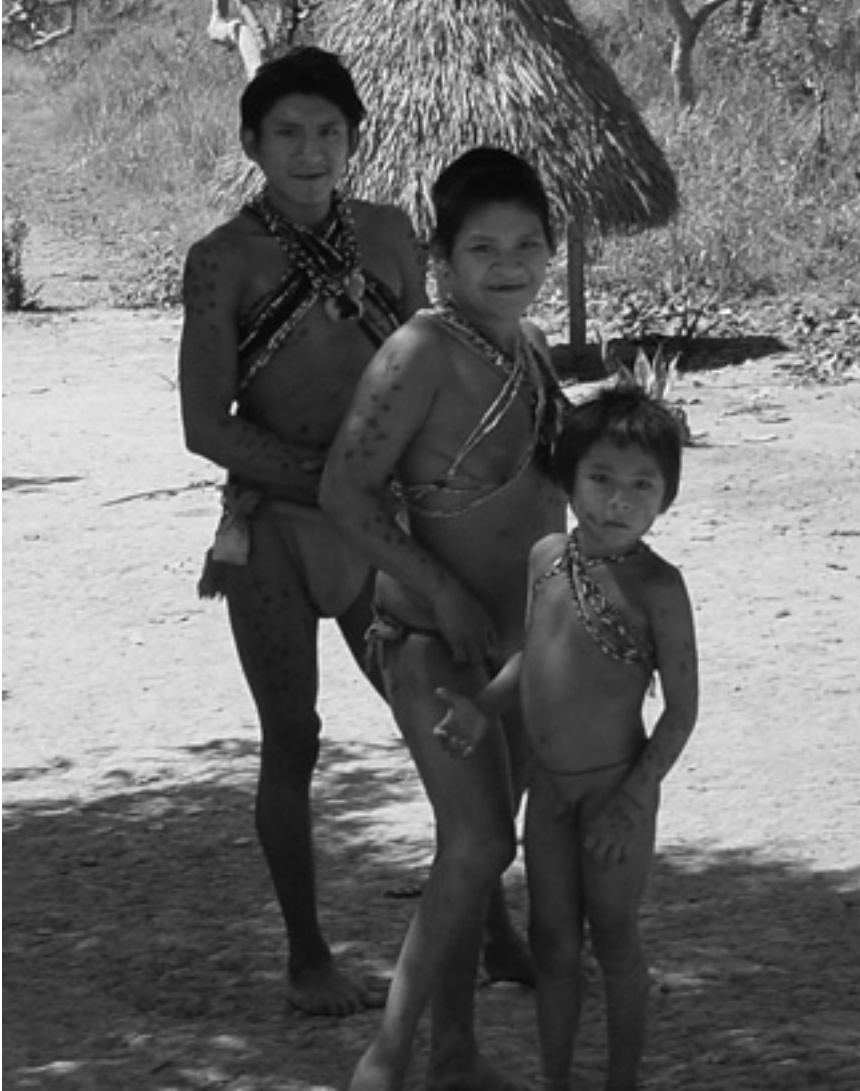


Figure 1. A Joti family

(usually poorly attended) gardens are kept. Gardening practices, in fact, seem to be treated as another step in a foraging oriented series of strategies applied in order to survive in an environment characterized by a seasonally unstable and spatially dispersed resource base. Procurement of wild or cultivated products does not seem to be associated with labor or property but rather with availability and accessibility along space and time gradients. Accordingly, the Joti dedicate about 81% of their subsistence activity time

to foraging and around 19% to agricultural tasks (see E. Zent and S. Zent 2003). As a corollary, the Jotĩ perceive all resources as coming from a giving living environment inhabited by giver-beings or persons (*jkadi jadi*) and not just as the result of human intentions or labor (see Bird-David 1990). A continuum of willingness, wants, and needs, which come from human and nonhuman beings, comes together in the Jotĩ economy and transcends the material sphere.

HUNTING BEHAVIOR: PORTRAYING A LIFESTYLE

One morning in May, 1996, and after five full days of hiking through the hilly forests of Jotĩ land, our party of five stopped after hearing the grave sound of a hunting song produced by a thick, single-holed, cane-bore flute. It was an invitation to hunt. The tone pierced the morning air and directed us towards its starting point: a couple of women grasping blowguns, lances, and a little baby. Remarkably enough, our first encounter with other human beings in this solitary wilderness was framed in a startling image. Amidst the splendidly verdant forest covering and close to the summit of the mountain (1000 m asl) that was darkly shadowed by towering trees, and surrounded by the sounds of animals and the chirping of birds, there were women hunting! That experience somehow took me to a timeless personal space: we the *women hunters*. We stood there while the tallest woman hunter stared and then touched me, as if appreciating the kind of “she-being” that had appeared in her territory.

That experience, coming early in my fieldwork, portended in some way my understanding of Jotĩ hunting that would unfold in days yet to come. Although most hunters amongst the Jotĩ are males, some females are active hunters and almost all married women are frequently the preferred companions of their husbands during hunting trips (cf. Rival 1996). Some teenaged and adult women regularly hunt alone, and some have equal or even greater success than men (Storrie 1999:161). There is no explicit prohibition against women hunting, except when they have their menstrual period. This exclusion, however, also extends to the woman’s husband for the same period. The Jotĩ believe that menstrual blood weakens the curare dart poison used with blowguns and is thus incompatible with hunting activities. Some Jotĩ women hunt on a regular basis, especially with spears, although they sometimes use blowguns as well. Most women are well aware of the habits, habitats, food preferences, seasonal rhythms, et cetera, of game animals. Some women are actively involved in hunting, chasing, and capturing game (such as rodents, small mammals or birds).



Figure 2. A woman hunter holds the *akuli* (*Agouti paca*) that she captured while hunting and caring for her son

Some accomplished female hunters stated that their mothers hunted with blowguns and introduced them to the art of hunting while on such outings. Most female hunters own both blowguns and spears. Many women initiate their children into the knowledge of hunting and animal behavior. In the ontological myth that tells why manioc is not a primordial food for the Joti, one of the key characters, *uli yewi ayn* (“jaguar’s female companion”), a brave and skilled female hunter, saves humankind from being eaten by the jaguar. However, despite the distinctive role of “woman the hunter” in



Figure 3. A woman narrates stories of her hunting trips

Joti culture, most hunters are males.

Among the Joti, hunting transcends the action of capturing and killing animals in order to benefit from the meat it provides (in subsistence and nutritional terms). Hunting embodies a lifestyle manifested in multiple contexts, based on specialized knowledge, skills, and traditions. Joti hunting is a way of life where technology, ecology and ideology merge—it generates a complex lifeway plan. Minimally included in this plan are: learning to make or trade hunting tools,² developing a good aim through years of constant training, and understanding the natural histories and ecologies of plants and animals that dictate the particular strategies employed to procure game. This life plan encourages the obtaining and maintenance of traditional ecological knowledge (including natural histories and ecologies, plant-animal interactions, game population distributions and movements, and anthropogenic impacts). But, Joti hunting goes beyond the indisputable importance of these practical requirements. Because it entails a way of life, hunting is embedded in a complex ideology that reveals a rich ecological and cultural knowledge. I will attempt to describe here what constitutes Joti hunting knowledge.

HUNTING IMAGES

From the time of birth, hunting is present in the lives of Jotĩ. Soon after being born with a strong *ijkwō ju* (literally “heart”),³ the father takes the baby’s placenta deep into the forest and places it partially submerged in the ground at the foot of a tree species considered to have strong *jk̄yo aemo* (“spiritual masters”). Adhering to a strict code of silence and fasting from all foods but maize for three days, he engages in the complex process of fabricating the *jnamodĩ* (literally, “spirits,” or “animus selves”). This process consists of two simultaneous phases: (1) a manipulation of diverse biosubstances—made up of mostly plants, but anthropods and fungi may also be included—through mastication. The resulting mass is then tied into a bundle and is used later to bathe the newborn. And (2) repeated requests are made to *jkēmabakā* (hypostatic spiritual primordial being, also called *jlae*) that ask for the best *jnamodĩ* for the newborn,⁴ which includes such qualities as good aim so that children will grow up to be dexterous hunters.

Baths with certain leaves in early childhood are credited with helping to nurture a skillful hunter. All throughout childhood, the Jotĩ undergo extensive ecological, technomaterial and ideological training. But it is during adolescence, starting around twelve years of age, that Jotĩ start to be called hunters, since it is expected that by then they will have mastered the basics of hunting to provide for a family.

Personal transitions from infancy and childhood to adulthood are marked with intricate ritual observances. There is a particular one that is deeply associated with the proper start of hunting vocation, as well as with the completion of the fabrication of the adult body, i.e., the total acquisition of the human condition. The ritual in question was first taught by *jlae* to the first humans. It takes place when Jotĩ are young teenagers. It usually involves a couple of potential spouses as the initiates (but can also be done for individuals alone), and entails behavioral, symbolic, and physical acts. A taboo involving all wild food products (game, fruits, grubs, et cetera) and an injunction of muteness are imposed on the initiate, lasting variably between seven days to three months. A tiny house is built inside the bigger house for the initiates (male and female) where they spend the nights for as long as the ritual lasts. The physical marker on the body of initiates consists of piercing the nasal septum (*ijko ño jkwa ili, ñona jkane*) with darts (made out of the midribs of palms, mostly *ulu jkojko*, *Attalea Maripa*), in

Figure 4. A boy hunting with a blowgun [right]



order to insert small wooden plugs that cannot be seen but which are then carried in that place for life. Great symbolic importance is attached to the plugs.⁵ An adult of the same gender takes the initiate to a mountaintop where the inner nose flesh just below the cartilaginous septum is perforated (usually by the initiates themselves). An initiate should look to the east during the procedure—as a memento of the eschatological beginning and end since the afterlife journey goes eastward—to the sun's abode. After that, the ritual involves a simulation of adult life and activities, consisting mostly of repeated hunting acts (e.g., pretending to track and shoot game) performed as the foretelling of successful future captures. The final stage of the ritual is designed to permit the full reinsertion of initiates back into the setting of social life (cf. DaMatta 2000). It begins with a total body cleansing and the suppression of the material or behavioral traces of the initiation (burning of the leaves that formed the house and the hammock, profuse conversation, beating on trees, and deep screams). This is followed by baths with plants, body paints, and adornments in a lengthy celebration (dance, chants, flutes, drinking of *chicha*) in which initiates are introduced to tobacco. Initiates are at this time also introduced to the custom of *iyudi*, or the objectification of food through conversations and soft chants with the captured prey or wild products, a practice aimed at turning the hunted and gathered products into edible matter, avoiding reverse predation and preventing transgressions that could incur disease or death (see Århem 1996a:194, 1996b:40; Viveiros de Castro 1998:67). Following the ceremony, initiates rest for about a week but afterwards will embark on a period of intense hunting during which the *iyudi* is practiced with vigor. The ritual implies an integral connection that binds the initiation procedure to the ability to hunt properly. The ritual opens an individual's hunting life—for both men and women—on the symbolic and spiritual, if not the behavioral planes.

As a rite of passage, this consequential step hides deeper meanings and intricate purposes that also embrace hunting practices: to successfully reach the everlasting land after the person passes away, to communicate with dead ancestors and sentient beings (invariably the “masters of animals”), to gain the power to cure (illness or poor health), and to secure prey. Nose piercing facilitates the apprehension of the *baede Joti baede jarwa* (“the old ways/lifestyle of the ancestors”), including the wisdom to capture prey. An adult person lacking the nose plug is doomed to total extinction after death.⁶ The ritual serves to diminish the chances of the person turning into prey. A person lacking the nasal perforation is forbidden to interact with certain vital biotic and abiotic elements such as fungi. The violation of the custom could even result in harm for the whole social group surrounding a



Figure 5. Corporeal adornment of strung beads

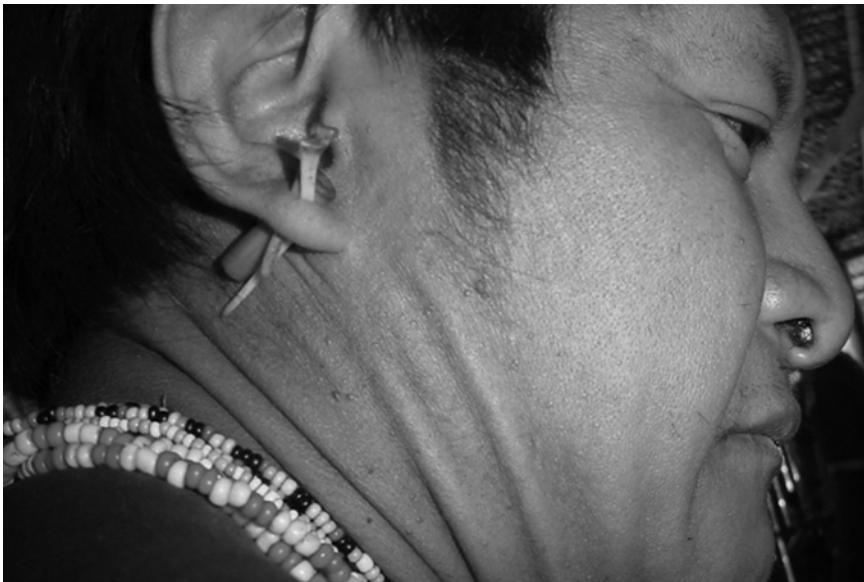


Figure 6. Ritualistic nose perforation

hunter. Those who experience the ritual could live on forever (in different planes of life) and are allowed to interrelate more freely with all beings and their milieus. This ritual establishes a sound ontological cyclic link between nature and eternity in humans. Every time the ritual is celebrated, it recreates the original metaphysical undifferentiated connection among spheres (plant, human, animal, fungal) and atemporal spaces manifesting a Jotí perception of unity and belonging. The ritual is a memento of three interrelated bodies of praxis and ideology in Jotí representations: “hunting magic,” *jkyo aemo*, and cosmology.

SYNOPSIS OF HUNTING MAGIC

A materialization of the primordial connection is expressed in the practice that, for lack of a better name—and insofar as it is thought to improve the hunter’s skills for capturing game through associations with certain plants, fungi and animals—will be called here “hunting magic.” Hunting magic consists of the individual celebration of primarily nasal, but also oral and corporal, ablutions including: libations (*au wae*), concoctions (*au jkwan*), inhalations (*au iño jkwa lamau*), and partial or total body baths (*au dīlī, au ibī*) with portions of some plants, fungi and even anthropods as active ingredients.

The Jotí are probably aware of the bioactivity that generates the consumption of these ingredients, since hunting magic may enhance hunting capabilities and augment the sensual perceptions (odor, scent, visual, et cetera) of the hunters. Hunting magic is a purification ritual. After the application of hunting magic, a hunter is purportedly able to see, hear, and smell game more acutely. Rubbing the entire body—with portions of the plants, fungi, or anthropods—was mentioned by Jotí informants as improving hunting success and as fostering communication among the sentient beings involved in the event.

Hunting magic is a tradition passed along from the ancestors by *jkyo ae* (a powerful primordial being) who taught it to *jkajo jadi* (the primordial light ones, shamans, and sage people) who in turn trained the original Jotí in the art. Hunting-magic practices are vehicles for (or containers of) complex ideologies that effectively and affectively link the different organic spheres. Certain plants, fungi, and anthropods are the primary vehicles used to achieve a vital connectivity because they act as *inductors* of the different material, intellectual, and spiritual forces that must come and work together to produce a successful hunting outcome. They are catalyzing agents of

imperceptible powers that enhance, connect, facilitate, or sharpen a hunter's aptitudes for approaching and securing game. All of the hunter's body is connected to the plants, fungi, and animals through hunting magic. A transfer of properties through the inductor to the hunter is ascribed to the practice of hunting magic. Physical parts of humans (the nose, mouth, hands), plants (bark, leaves, flowers), fungi (hymenia, pilei, flesh or fluids) and animals (bilic secretions of the spleen or liver) are implicated in the tradition. The inductors seem to make explicit the nonapprehensible ties of cause and effect among the spheres. These inductors—insofar as they improve the hunter's skills for capturing game through associations with certain plants, fungi, and animals—connect the hunters' *jnamodi* with the animals' *aemo* (their invisible transcendent spiritual selves).

The hunting-magic rite is usually performed the day before the hunt or on the very same day. The hunter must fast prior to the rite. Once the ablution is completed, however, the hunter (male or female) is allowed to eat. The selection of plants, fungi, or insect inductor species depends upon the particular hunters, their experience and knowledge, as well as on the targeted animal prey species. Some specific plants, fungi, or anthropods are considered to be specifically good or efficient for gaining control of certain animals, whereas others seem to operate as generalists because they are deemed to be valuable for securing a broad range of game. More than 109 folk botanical species⁷ and seven fungal species were considered to be inductors by the Joti. All but seven plants grow wild in the high forest habitat. Their aptness for use in hunting magic is frequently expressed in terms of the following qualities: *ejkaka* ("bitter"), *julurwejte* ("strong"), or simply *jtijae* ("good") for hunting. Hunters are initiated in hunting-magic practices by using first the less powerful plants or fungi. Eventually, as hunters become more proficient with age, they progress to the stronger, and potentially more dangerous, inductors. This progression is prudent, since some of the ablutionary and infusive treatments are toxic and hence require that the subject learn to vomit properly in order to avoid any harmful effects. Some hunters were initiated in magic-hunting by one or both parents when they were still children no older than ten years of age.⁸ Many hunters also experiment with new and untried plants, anthropods, and fungi besides the ones taught or used by others of their group. Significantly, the favorite inductors varied between and among families and communities (E. Zent and S. Zent 2004). Since chemical studies on species involved in this practice have not been done, it can only be assumed that the efficacy of hunting magic could be explained on the basis of the bioactivity produced by phytochemical properties and by cultural factors, or a combination of both.

SYNOPSIS OF *JKYO AEMODĪ*

The inductor plants/fungi belong to the animals' *jkyo aemodī* (*jkyo aemo* being the singular form). *Jkyo aemodī* are spiritual beings, which are conceived to be a nuclear family—consisting of male and female spouses and their children—and which seem to be equivalent to the “masters of the animals” reported in the ethnographic literature for other Amerindian groups (see Reichel-Dolmatoff 1971; Århem 1996a; Viveiros de Castro 1998, 2003; Erikson 2000; Cormier 2003a). *Jkyo aemo* are complex and mighty beings. An imperfect translation could refer to them as protectors, or ideal beings, while they could also be Jodī (humans) and *jkajo jadī* that eventually could turn into a person's predators (cf. Århem 1996a; Viveiros de Castro 1992, 1998). They tend to conglomerate among their own kind and regulate the flow of their populations (species) in a particular area, since animals must die to assure the reproduction of life (see Århem 1996a). Since primeval time, all animals, insect, plant, and fungi beings—along with all of their kind—have had *jkyo aemodī* that inhabit particular habitats in sectors of the forest, river, underworld, caves, or sky. They live in the world with humans, moving around and amidst them. An animal's *jkyo aemo* possesses specific trees or fungi, such as: *uli jkwayo jtarwī* that is bound to the *uli jkwayo aemo* (“spider monkey protector spirit”), *jkwii jtarwī jyeī* that is bound to the *jkwii aemo* (“guan protector spirit”), *jkamaya jyeī* that is bound to the *jkamaya aemo* (“macaw protector spirit”), and so on. The trees are tied to the respective animals' *aemo* and that connection facilitates the hunter's capture approach and technique. A plant with a particularly strong *jkyo aemo* is tobacco (an ever-present figure in mythological accounts and initiation rites). Since the Jotī lack a distinctive notion of private property concerning natural resources, hunters do not ask permission to catch animals. Instead, hunters demand game of and from the animal's *jkyo aemo*. But, in order to do so, hunters need to keep themselves on good terms with all of the animals' *jkyo aemodī*. It is the *jkyo aemodī* that decide when, how, and where its kind can be hunted and how many of them are able to coexist in a particular time and space. *Jkyo aemo* also provide food, shelter, and security for their kind. They are aware of proper management and manipulation of the forest fauna by people. All animals, as well as plants and fungi, have a constant population flow that never diminishes or increases if treated properly. As is true for people, animals are never extinguished but rather their populations are renewed cyclically. This explains why the *jkyo aemo* are honored to see the skulls and bones of their



Figure 7.

Bones hanging from the outside of a house, signifying the death of an animal and indicating the path to the wandering *aemodī* of the individual hunted prey

own kind set on sticks outside the hunters' houses. Such displays serve as clear signals of the return to their respective *jk̄yo aemo nurwei* (home or homestead). This fulfills a natural cycle and symbolizes their *aemodī* ("souls") being returned to their eternal home. From there, they will re-embody and return again and again to the earth, securing the availability of game for humans.

Animals can be understood to be part of the Jotī cultural environment. Game animals and pets are considered part of a living continuum akin to humans. Except for a few introduced domesticated species (e.g., dogs, chickens), the Jotī interact mostly with wild animals, which seem to adhere to more than one implicit role in social dynamics. Wild animals can function as pets, play things or toys, and living specimens for socializing children about the habits and nature of the species in question. Animals are also the recipients of the most aggressive behavior recorded amongst Jotī, who are otherwise a commonly pacific people. Most importantly,

animals embody complex ideologies and ontologies.

As with many lowland South American groups, a diversity of wild animals are kept as pets within the domestic space of Jotĩ settlements (see Cormier 2003b; Lizarralde 2007). If trapped as infants, birds, monkeys, rodents, bats, and myriad other forest creatures grow up as part of the community and are regarded as adopted children by the Jotĩ (see Fausto 1999). Often, pets are transported by Jotĩ as they move around, and are sometimes considered to be trade goods. By virtue of this custom Jotĩ children acquire much practical zoological knowledge in their early childhood. Under no circumstances may the pets be eaten if they have become part of the settlement group. Forest animals (*jkyo nĩma jadi*, *jtaujkuwẽ kwa ma jadi*) are suitable creatures to be chased, hunted, and eaten by people. In contrast, inner settlement animals are a metonymic continuation of the human sphere, and thus are good to keep but not to eat (see Cormier 2003b).

A clear ecological consciousness of interaction—rather than dependence—is expressed in the hunting-magic practice, as well as in most of the mythological accounts. Thus, the primeval link of the botanical/fungal/zoological/human spheres is expressed in the phylogenesis of humans, most animals, fungi, and plants on earth.

COSMOLOGICAL SYNOPSIS⁹

The first woman was carved by the last *jkajo ja* (generic term: “wise man,” “survivor of the last total destruction”) from a tree,¹⁰ and then she bore the first two of men. These first adult males became fully human when their mother gave them a bath with the first mushroom that sprouted from her foot when she was very old. Another set of humans was modeled by the *yowale* (*Didelphis marsupialis*, the opossum) in the underground with the discarded skin of plantains and bananas.¹¹ There are different versions of human creation stories that are associated with different Jotĩ bands or descent lines. But all of the origin tales overlap in the revelation that there are intimate interrelationships of Jotĩ/plants/fungi/animals that signify an original unity from which all sentient beings came.

In Jotĩ belief, most animals were originally people. Even today many animals are considered to be relatives (the kin) of people. The pertinent myth tells how humans became animals after singing in and around the tree trunk of *jkyo jkwẽ jyeĩ* (*Virola* spp.) in primordial times, when they decided to walk from the west (where the sun dies) to the east (where the sun is born) following the suggestion of a clever man who transformed

himself into the *uli jkwayo* (*Ateles belzebuth belzebuth*, the spider monkey). *Uli jkwayo* and *nimö* (the howler monkey, *Alouatta seniculus*) were the first to discover cultivated plants around the same tree. There is an almost translucent association between this ontology and the Jotí predilection for hunting monkeys, to the extent that “shooting monkeys” (*jkwayo ju dobabi*) is the common phrase designating true hunting. This account also evinces the typical Jotí characterization of the *uli jkwayo*, the Jotí’s most highly treasured game, as having a mischievous nature. Moreover, from the felled trunk, explains the same myth, came all cultivated products. They too were once humans and decided to emerge as useful plants to provide sustenance for people. Another set of stories explains that many wild plants were also once people, among them all palms and the canes used to manufacture blowguns. They came walking from the sun’s abode and determined where specifically to live and then became specific plants. *Jkajo jadi*, both male and female, encountered the canes first, and taught *nin Jotí* (“the true humans,” or “the real people”) to manufacture and use blowguns. True humans in this sense denote humanity as a social condition of person, not exclusive of one species (in the sense of Viveiros de Castro 1996:12).

In Jotí ecological imagery, cross-identification or interchange of spiritual and material qualities and essences takes place between the spheres of living organisms. Each time a human hunter kills an animal the original transformations (human/animal/fungi/plant) are recreated and enacted anew, thus guaranteeing the constant recycling and hence steady supply of game (see Århem 1996b:53). But above and beyond that, encounters with animals are permeated with dichotomous transmutations in which the *real* sentient being is *perceived* and the *perceived* being is *real*. Monkeys, jaguars, tapirs, armadillos, frogs, anacondas, curassows, macaws, ants, caterpillars, scorpions, et cetera, all could be something or somebody else, and all have complex descriptive phylogenetic explanations.

In this context, hunting magic does not merely improve the ability to hunt, but rather it *restores* the capacity to successfully capture game by purifying hunters when they or their group commits transgressions against one or more of the biotic spheres, thus damaging their connection with the wholeness. Such ruptures are expressed in at least three ways, as when hunters (1) are unable to catch an animal because it does not fall or die, even when it has been successfully struck, (2) have lost their good aim, or (3) are unable to track or find animals. Among the personal or collective transgressions mentioned are the violations of food taboos or offensive social behavior (e.g., selfishness, gluttony) at the risk even of global destruction and chaos (see Reichel-Dolmatoff 1976). But undoubtedly, the worst and most frequently cited offense is the inappropriate manipulation

or rupture of the animal's "*waña*." In the organic realm, the *waña* is most likely the bilic secretions of the spleen or liver (*ojtejte jyu*). The *waña* is the object of special and extremely delicate treatment. It must be handled carefully once the game is taken to the settlement and the animal's body is butchered and cleaned. Usually, before the meat is cooked and depending on the kind of animal, the *waña* should be buried close to the hearth, near the settlement or deep in the forest. Menstruating women and children should never touch the *waña*. If the *waña* is broken, then the hunting-magic purification rite must be performed, initiating a new hunting cycle. Ideologically the *waña* is a powerful *agglutinant sensor* (entity, sentient active agent) conveying a magical force that clusters together plants, fungi, animals and people. Although in most animals the *waña* is located close to the liver, in others it appears in different regions of their bodies. The shifting location also occurs with the botanical or fungal agglutinant sensors, since the magical essence does not have a uniform location and varies according to the particular plant or fungal species involved (leaves, bark, hymenia, pilei).

The *waña* was invented by *uli jkwayo* so that he and his kind would never die. *Uli jkwayo* was an ingenious creature who crafted many things and those that were considered to be useless were disposed of and later some of them converted into different natural elements found in the living world today. One of them is the primordial fungi called *uli jkwayo waña yakino* or *jkyo waña yakino* ("the mushroom or fungi that sprout on rotten logs or earth in the forest"). This fungi is thought of as a vigorous creature that restores the hunter's drive for obtaining game. *Jkyo waña yakino* embodies the earth nature sensor, or earth sentient agent. Consistent with the causal logic of the doctrine of signatures,¹² the fungi *jkyo waña jae* resembles the animals' *waña*. It is like a memento of the primeval times. It seems to be a potent and ever-present device for hunters to restore their ability to kill, while at the same time preserving the animals' populations. A drop of the fungus' liquid is inserted into the hunter's nostrils to ensure that the shot game actually dies and is captured. This, in turn, re-establishes the connection between all hunters, all animals of the kind killed, and the animal's *jkyo aemo*. A cyclical connection is renewed every time the hunting-magic rite is performed, and the link between hunter/game/plant/fungi contains a transferable energy. Many, but not all, animals have *waña*, since in mythical times some people (who later decided themselves to transform into animals) picked up the *jkyo waña*. Those that did developed a *waña* as part of their internal organic anatomy once their bodies morphed into animal form.¹³

The animal's *jkyo aemo* is capable of perceiving and is sensitive to the manipulation of the *waña*. The improper handling or the breaking of the *waña* necessitates the hunting-magic rite or other restitutive mechanisms.



Figure 8. The bark of a tree ready to be prepared and used as hunting magic by a hunter

The latter may entail the hunter cutting his tongue with the coarse leaf of *nin jani wejkaō* (*Pourouma* spp.) or with a young branch of *ili kwe jyei* (*Ormosia* sp.), and then letting the blood drip onto the *jkyō waña yakino* or onto the entrance of some poisonous insect's nest (e.g., a bullet ant (*ineyodī*) or "24-ant" (a big, strong, hard, black ant so-called because it produces a twenty-four hour fever if it stings); a big black ant (*uli inedi*); a tiny red stinging ant (*imo*); a black army ant (*jyō*); a scorpion (*ijti*); et cetera). In the case of improper handling of the *waña*, the blood should cover the *jkyō waña* so the hunter recuperates his abilities and connectivity with the natural spheres. The lethal power and strength embodied in the poison of the insect is transferred to the hunter, thereby dispelling their weaknesses and enhancing their strengths. The pain produced through this procedure acts as a catalyzer that transmits the tree's substance and the insect's poisonous qualities to the hunter. Attribute transferences also occur when a scorpion or other insect with a stinger (*anene yede*)—such as wasps (*mu jadi*) or urticating caterpillars (*wejtowa jadi*)—is burned and the hunter smears his face with the ashes it produces. The poison of scorpions and some snakes is similarly effective after it is extracted, mixed with water, and introduced into the nose. The scorpion was once a great human hunter in the ontological myth that explains its

multiple uses. Cutting and puncturing the tongue tip using the urticating caterpillar hairs (*wejtowa anene*) and the little wasp pupae (*mu inimo*) were also mentioned by some Jotí, while wasp's hives (*mu abo*) could be rubbed over the bodies of hunters in order to have a successful hunt. Humans rely on plants, fungi, and arthropods to access the nourishing substances provided by game. This process is facilitated by the apprehension of the essential bioagents embodied in vegetal, animal, and fungal organisms that can penetrate humans physically, commonly via the nose or mouth.

Notable elements of the hunting paraphernalia include skin painting (*maluwe durwidekai* or *jkaliideki*), dreams (*aburwi dumē wē dekae*), songs (*jobei*), and flutes (*jtajwibo*). The hunter's painted body acts as an armored suit to protect the self against potentially dangerous or harmful beings when decorated with special resins (*malu jnaina*), seeds (*dale*), leaves (*aiye*), as well as the inner wood—the sensitive inner core—of certain tree trunks (*jkwajtaka*), which are capable of communicating with the *jkya aemo* by operating as the plant's natural sensor. The resins and seeds are mixed with ash preparations (*walejte najna*) made out of different substances and essences (actual “tools” made of the essence of animal parts, including hearts, bones, exoskeletons, et cetera). A favorite mixer comes from a malodorous white liquid (*kyabo jyu ijkwō ju jkwama jawwa*) extracted from some animals' hearts (e.g., tapir, spider monkey, peccary), which are then slowly cooked on embers until charred. The resultant ash is collected and deposited in gourd containers and then mixed together with the trees' resins just when hunters are ready to paint their bodies. Other mixing ingredients consist of some nonedible inner cartilage of many fish (*jkwailebo mojtodi*) that is hung over the hearth until it is dark and converted into ash. The same procedure may also apply to the bones of certain animals, as well as to insects with stingers or poisons (e.g., wasps, certain ants, 24-ants, scorpions, et cetera) that are pulverized to ashes after being slowly burnt with embers. Specific vegetal body paints and powders (blown into the air) are also used with the intention of attracting certain prey. The vegetal resins used are sometimes brightly colored—reddish, yellowish, in different tones—but more often they are black. The mixed preparations (resins, essences, and substances) are applied to the arms, legs, chests, and faces in a usually disorderly series of dots. This is done in order to scare away harmful creatures from this and other worlds (of ancestors, animals, spirits, et cetera), as well as to please the prey and its *aemo*. Such mixed preparations work as a charm, attracting specific animals toward the hunter since their odor is appealing or to keep away dangerous predators (cf. Reichel-Dolmatoff 1971:221).¹⁴ Body paints establish a clear perceptual and factual difference with other sentient beings, notably the predator *awēla* (a mischievous complex

conglomeration of individuals, that agglutinates all undifferentiated harmful dead or unknown malevolent conscious and intentional beings). In sum, body paints (1) protect humans from divine or cosmic predation, (2) attract and please an animal's *aemo*, a potential human predator, and (3) act as natural sensors to connect the hunter with the real primordial world.

Dreams and music occupy a prominent place in Joti hunting. *Nin aburwi dume we dekae*, or real dreaming, is a delicate¹⁵ and very complex art learned by certain persons (male and female) after enduring particular initiations, including nose piercing, intensive trainings, use of particular plants and fungi, and the reception of other cultural knowledge (e.g., songs, stories, fasting, et cetera). The development of one's talent to dream involves the capacity to see the game¹⁶ and their availability, as well as the ability to interfere positively with their *jkyo aemo*. While asleep and dreaming, it is the person's *jnamodi* that is able to see (seek and find), call up, and demand of an animal's *jkyo aemo* that it provide one of its kind to the hunter. Especially gifted dreamers might communicate directly with some animals' *aemodi*.

Awake or asleep, hunters sing songs and play different kinds of flutes. Nocturnal singing—especially of a song intoned in high pitch just before dawn—is associated with hunting trips. Such singing usually is performed just hours or even minutes prior to walking out into the forest and helps to unfurl the highly individualistic aesthetic and beauty concept that is concealed in the hunting art and interwoven with this complex set of phenomena. Thus, just as different hunters make use of specific species for hunting magic, the songs intoned vary according to the animals being sung to, the specific spatiotemporal occasion, and the hunter who sings it. The purpose of these songs is to predict a successful hunt. The actual singing can last up to three hours, although sometimes it is sustained intermittently. The lyrical content of the songs frequently represents a facsimile of the game animals' own sounds and language, and often may recount a sequence of successful events that will conclude with the prey's capture. Sometimes, a hunter's chants are answered by another hunter's counterpoint dialogue of tunes.¹⁷ During various cultural festivities (*maluwe man*), hunting songs are also chanted, especially the days-long drinking/feasting/dancing ceremonies to call the game and gain favor with their *jkyo aemo*. Long tones—chanted by individual women or men as they are dancing—are commonly answered by other voices in a lively chorus that imitates the hums and croons of animals. Crowns, cloaks, and aprons or skirts made out of palm leaves (especially different species of *Attalea*), along with tapir and white-lipped peccary hoof-queued rattles on long sticks, constitute the

festive attire worn during the *maluwe man* ceremonies. (For a description of Joti feasts, see Storrie 1999:151–155.)

AMID THE TREES: FOREST HUNTING MEMORIES

Hunts occur in the middle of the forest, near or far from the settlements, but they also happen occasionally close to the garden edges. Most hunting trips are set into motion before the dawn's first light, when sharp eyes can detect the silhouettes of potential prey. The route to travel depends upon the hunter, the season, and the availability of game. No exclusive rights over hunting areas are held by any specific hunters and hunters range widely and freely over the lands surrounding their homes (in a twenty kilometer radius). In their traditional surroundings the Joti hunt on most days. They also hunt every five to six days when they live in areas of the mission communities. Distances from one to nine kilometers constituted the normal range in which successful hunts occurred among the nonmission groups. Forty-three mammal species and sixty-five bird species were the most frequently recorded hunted game during the period of my fieldwork.¹⁸

Hunting magic proved empirically to be effective and efficient whenever it was observed. Two memorable hunting episodes illustrate the beauty and effectiveness of Joti cultural and ecological knowledge in action.

Upper Mosquito, October 1998. The combined practices of songs and inductor plants proved to be effective in a *jkyo balebi*¹⁹ outing, on this occasion a trip to hunt monkeys. In the obscure morning light, shadows could be observed swinging in their hammocks, while hunting tunes were heard in the predawn darkness for about 40 minutes. A few minutes before daybreak I followed Jani-yewi and Jani-yewi Aun,²⁰ a young married couple along with their fifteen-day-old child, who went hunting in the nearby hills in search of game. Almost imperceptibly and without hesitating as he climbed, Jani-yewi snatched a couple of leaves from a young plant of *uli jkwayo jtu jele* (an immature “spider monkey’s head” treelet). He crushed the leaves with his fingers, and then put the leafy mass into his nostrils. He continued climbing the hills at a rapid pace. Ten minutes later he halted abruptly to pick up three young leaves of *jani jtijti jyei* (“little bitter bark tree”). Again he squeezed the leaves in his hands and placed them in his nostrils, rubbing his outer nose with the mix. We all felt embraced by the forest as we walked quietly through it. Suddenly,

Figure 9.

A boy holds a giant anteater (*uli jmoko*) he keeps as a pet



the couple started to run toward an unsuspecting animal. Aun had been the first to spot and point out the prey to her partner. A half-hour after using the plants, Jani-yewi shot several darts. True to its mark, one killed an *uli jkamaya* ("big macaw," *Ara chloroptera*). This macaw was a member of a small flock of seven birds that, nearby, were noisily eating fruits of *awëla jlude jyei* (*Dacryodes peruviana*). After stripping off the dead bird's feathers, Aun tied the animal to her shoulder with tree bark, "*bajtu jono jyei dodo*" (*Lecythis corrugata*). In a relaxed manner, for the next two hours, the couple collected and ate *jlude* fruit before resuming the hunt.

Among Joti, what appears to be leisure time or inactivity on the trail is subtly more complex. Moments of rest in the forest, while pleasant and genuinely savored, nevertheless provide an opportunity to gather information and to focus thoughts. The Joti seem to activate their senses, registering and adding to their mental cartography and inventory of resources and facts. They confirm that they are, in essence, making mental notes about the forest and its various resources (animals, plants, anthropods, et cetera) and calculating distinctions concerning the environment.

After our rest time, the hunters chased and captured three spider monkeys. Fine distinctions in the sounds of the monkeys' calls—imperceptible to the uninitiated—combined with knowledge of sleeping and eating habits of the monkeys, guided the hunters to a *jwilo* tree (*Bathysa* sp.) where the troop of monkeys was found. Running fast after the troop, the couple approached the tree. Quietly and with great dexterity, Jani-yewi pointed his blowgun towards a male monkey that would become the first to fall. Securing her baby on her hip, Aun grabbed the fallen corpse and immediately pointed up towards a branch where three other monkeys were jumping wildly, now keenly aware of the hunter's presence. I lost sight of the hunters for the next twenty-five minutes—it seemed much longer to me because I was now alone—although I could hear the distinctive puffs and pops that signaled shots from the blowgun. Left behind as the hunters pursued their prey, I sensed the strength and complexity of the forest and my own inability to survive there for even a single night alone. After what seemed a long while to me, the couple suddenly came back into my focus. Smiling, they showed me the still, lifeless animals that they both were holding. There was a big adult male, a female, and her infant, all part of a troop of more than ten monkeys that had been loudly jumping and eating *jwilo* fruit. The hunters fastened together monkey carcasses weighing more than twelve kilos, by using the tree bark of *jani jtakwa jele* (*Brosimum* sp.), and then we began to walk back home. This Jotí couple had worked together effectively employing a hunting strategy that involved them mutually. Jani-yewi used approximately 50 darts during the hunt. Aun, the female hunter, was not on the hunt simply to accompany her husband. She was an active participant in the hunt. She knew well the eating habits of the game, helped Jani-yewi to direct his aim, scared the monkeys out of their hiding places, and aided in locating them in the ensuing hunt.

The monkeys were skinned once we were back at the settlement and everyone—except for me, a lifelong vegetarian—happily ate the meat.²¹ A few weeks earlier, Jan-yewi and Aun could not have eaten the monkey meat, due the taboos for pregnant women and expecting fathers that prohibit the eating of spider monkeys, howler monkeys, squirrels, porcupines, giant armadillos and sloths. It is believed that the long-clawed *awëla* (“bad material spirit”) of these animals could kill or harm the baby. The pregnancy taboo symbolizes metamorphosis and transformation from an undifferentiated sentient being to a differentiated human being (cf. Taylor 1996:205).



Figure 10. A Joti man with bow and arrow

Lower Majagua, dry season 1998. Hunting journeys may be solitary, partnered (brothers, sisters, young teens) or, most frequently, collective affairs. The Joti are gregarious people who love company. This may explain why married couples make up the preferred team, while hunting parties of three or more persons are common. Depending on the game to be tracked down, collective hunts may incorporate as many people and dogs as are available in the settlement. Hunting tapir (*uli yerwō*), the largest mammal of lowland South America, for example, calls for the participation of all willing members of a community, male or female, older than about five. The pursuit of tapir is a team effort. Dogs track the animals' scent and direct the hunting party's route. Once the location of a tapir has been determined, women and children make noise and gestures to shoo the animal in the right direction so that it can be chased down and speared by the hunters carrying lances.

All but four members of the Majagua community (including twelve men, women, and children) successfully slaughtered a tapir weighing over 160 kilos in a collective hunt expedition in December 1998. Using sharp lances, two men and an adolescent girl ambushed and stabbed the mammal after a woman carrying a baby and other members of the party had chased and directed it towards them. As the carcass was being butchered on the kill spot, the guts were sliced open and the partially digested leafy matter inside was scooped out and then rubbed over the bodies of the hunting dog companions in order to enhance their capabilities to track tapir in future hunts (Stanford Zent, personal communication; see also Reichel-Dolmatoff 1971:224). This successful hunt was foretold a few days before when I witnessed a practice called *inĩjtĩle* applied with the stated objective of inducing the big animals to stray across the hunters' path. Walking in the forest our party including five hunters ran into a hoofprint (*jkana inĩ* or *inějkō*) that had allegedly been left by a tapir two days before. One of the hunters promptly decided to put into practice *inĩjtĩle*, and extracted from his small cane vial (*waiye bo jtajwibo*, made out of *Guadua* spp.) the rhizomes of two plants, *uli jkalimane jkōjkō* (Cyperaceae) and *duwebe bule ilē jkōjkō* (Marantaceae). The attractive yellow-orange Marantaceae rhizome releases an intense and agreeable scent contrasting with the white roots of the Cyperaceae, with its strong foul odor and flavor. Using a section of the spiny aerial roots of *muli ji* (*Socratea exorrhiza*), the young hunter grated portions of both rhizomes. After mixing them together he sang in a very soft voice. Then he proceeded first to bury the mix under the tapir's track, covered it with pieces of rotten wood, and next to lay some leaves and sticks (of about twenty centimeters each) of *jtuliwēdĩ jele* (*Rinorea pubiflora*) on top of it. The killing of a big tapir a few days later was celebrated as

Figure 11.

A man returns home in the evening with the game of a successful hunt, a *jani jkajwiye* (*Tayassu tajacu*)



proof of *inĩjtĩle*'s effectiveness in providing over a week's supply of meat for the entire community. *Inĩjtĩle* is also employed by members of the Kayamá community, who reported making an arc out of *ɔ ibuju* (*Paragonia* spp.), which is placed on top of the animal's track, and then covered by crossed sticks of *nũjtĩẽbo jẽle* (*Faramea torquata*), *jtejtewuajka jẽle* (*Brosimum* spp.), and *jtuliwẽdĩ jẽle*. According to local wisdom, *inĩjtĩle* persuades the tapir (*yewõ*) or peccary (*jkawĩye*) to return to the same place and stay there without running off.²²

ETHOS AND PERSONHOOD IN HUNTING PRACTICE

Joti hunting practices are based on a profound knowledge of their natural environment and are enriched with a complex ideology that is immersed in logical explanations of their world's ecological functioning.

Empirical and serious ethological and phenological knowledge—e.g., the behavior of animals, their habits (nesting, feeding, et cetera), frequency of a species in a given area, sexual dimorphisms, life expectancy, shapes, and colors; the habitats of plants (lagoons, terrain, forest, et cetera), seasonality, among many other aspects—are masked in Jotĩ ideology and mythological accounts. This knowledge permits successful hunting and contributes towards the successful production and reproduction of Jotĩ culture and biology. It is perhaps worth highlighting the Jotĩ covert notion of a “web of life,” a concept similar to the “cosmic web” of the Makuna (Århem 1996a) that pervades many aspects of their hunting ideology and behavior. The web of life concept is similar to what some scientific ecologists have theorized (cf. Carson 1962; Margalef 1981; Odum 2000; Ulanowicz 2000). However, it goes way beyond the biophysical level because in Jotĩ conception the web of life unites the material with the spiritual world, the primeval with the present (and future), and the ritual with the mundane. This radically diffuse ecological worldview of the Jotĩ, along with their beliefs in spiritual and material reincarnation and regeneration, make it difficult to evaluate their ecological behavior by western values and criteria alone. The real effectiveness of hunting magic, although embedded in a shamanic initiation, begs the question: Where does one draw the line between objective pancultural knowledge and subjective culturally relative knowledge? A potential “rational” answer may be possible by analyzing Jotĩ hunting behavior in relation to the biochemical activity of certain plants, as has been done for other Amazonian groups such as the Matsigenka (cf. Shepard 1998).

The hunting practices of the Jotĩ are integrated into their world ethos. At least three aspects of this ethos are revealed both in hunting behavior and ideology: (1) a recurrent amalgamation of outer-inner perceptions, (2) a constant cross-identification and overlap among apparently distinct organic beings, and (3) a lack of a central commanding human or divine figure. Instead, the Jotĩ postulate a proliferation of hypostatic sacred and mundane beings acting in harmonic or confrontational syntony in order to shape the primeval and present worlds.

A few examples can serve to convey the themes of Jotĩ world ethos. The body paint of the hunter helps and enhances connections with other beings inside the special organic domain of the forest. Body paint has numerous cultural meanings and intentions. Body painting goes beyond aesthetics. It is particularly significant that the hunter’s body acts as a shield to protect the “inner person,” conceived to be several integrally connected but separate elements. Some interrelated transcendent components of what can be thought of as personhood—which includes people, some

animals, stars, the sun, insects, et cetera—should be mentioned. *Ijkwō ju* (“heart, blood”) allows one to see, feel, oversee, know, apprehend, and live as a sentient being. *Jnamodī* (“spirits, animus”) allows one to dream, understand, comprehend, and acquire the ancestors’ ways. *Īnē jā dodo* (“material body”) allows one to perceive, think, move, inhabit tangible or material space, or transform the appearance of the body (that is, the growth, shape, form, size, texture of the body or individual). Once a person dies, *ijkwō ju*, *jnamodī*, and *īnē jā dodo* (the inexact equivalents of heart, soul, and body) are transformed and may live eternally or indefinitely as sentient beings in spaces other than the material or organic world. Every Joti has one to four *jnamodī*, each with particular characteristics and each capable of communicating directly with other *jnamodī* (of people, animals, plants, et cetera). Once a person dies their *ijkwō ju* and *jnamodī* (1) suffer a set of transformations, (2) encounter different spiritual hypostatic beings, and (3) travel through different physical paths towards the sun’s abodes. Eventually they turn into a tiny “person” that awakens from the *ijkwō ju*. The *ijkwō ju* is thought to be the first component of personhood to appear as a definite shape when a being is engendered in a womb. It is the first component to enter a self and also the first to leave when a person dies. The afterlife whereabouts of the *jnamodī* and *ijkwō ju*—(*jlae nuwei*, “in the sky;” *jkyo aemodī nuwei*, “located in many mountains but here on this middle earth;” or *uli yowale nuwei at jné kwa*, “the underworld”)—change according to the origin myth of the speaker’s band. The physical body (*īnē jā dodo*) is the only visible form in this order of perceptible reality. It is also liable to convert itself after the person passes away into a set of nocturnal predator animals (opossum, jaguar, owl, et cetera) or into *awēla*, a *nonperceptible* and sometimes *corruptible* predator being. In this sense, once a person dies their “self” never disappears totally. Rather, it becomes part of a larger, conglomerated (undifferentiated), indefinitely bounded, and powerful being consisting of all dead Joti. Eventually, all memory of that person disappears with the demise of the last living person to remember them. *Awēla* is the materialization of a social identity of a person, which fades away to the people who remember it (cf. Storrie 1999:122). The mischievous *awēla* is usually blamed when solitary hunters suffer some harm in the forest. The *awēla* can take on many profiles and can materialize into any biotic or abiotic element of the cultural or natural landscape. Different fearful and loud sounds heard deep in the forest are attributed to the *awēla*, as are unusual encounters with animals. In sum, a hunter’s body paint (mixtures of vegetal, animal and fungal elements too) acts as the human “agglutinant sensor” or connector with the different organic spheres. It serves as a shield and attractor of game and as a physical



Figure 12. Boy holding a juvenile *jmujkelo* (*Potos flavus*)

channel to transmit and transfer properties and essences. Furthermore, a hunter's body paint is the physical manifestation of the hunter's volition, announcing the objectification of the prey (cf. Viveiros de Castro 1998).

In Jotĩ ideology and collective memory, there is an often repeated, and at first seemingly anthropocentric, conception of "the self" that stresses a perpetual organic presence and depicts human limits, inaccuracies, mistakes, and faults as built-in attributes of human nature. It does this without moral recriminations. The actions of individual organic species and ecological processes, which are based on profound biological knowledge and are well represented in the mythological stories, are likewise not evaluated by moral criteria. An unambiguous linkage between human volition, other organisms, the natural order, and "essences" is found in these mythological accounts. There are no extra-human powerful beings, such as gods or goddesses, which intervene in the creation of plants, fungi or animals. Rather, Jotĩ ideology postulates agency to humans who seek to shape and consolidate their environments. Thus, people may be semi-divine and they have an inherently purposeful nature in Jotĩ ontology, cosmogony,

and eschatology. Again, there is no single deity, but rather many *hypostatic beings* (divine, human, not sacred, sacred, mundane, et cetera) that become involved in the primeval as well as the everyday movement of life. Jotĩ thought seems to be totally devoid of a concept of centrally powerful figures or “deities.” Instead, the Jotĩ recognize blending interactive forces, as well as inertia, as coming from different organic and inorganic spheres. Animals, like people, may be eternal and are “persons” with agency in a web of relatedness (cf. Århem 1996a). The Jotĩ recognize loose, labile, and fuzzy limits of their individual “selves” in hunting events, and predators may turn into prey in a cycle of eternal reproduction of life (cf. Conklin 2001).

Animals are more than just something good to eat. Considering the monkey as an example is enough to illustrate the polyvalent integration of animals in Jotĩ life. The active role of the spider monkey (*uli jkwayo*) in mythological, cosmogonical, and everyday hunting practices is a reflection of the importance of monkeys for the Jotĩ, as well as for many lowland South American groups (cf. Cormier 2003a, 2003b; Erikson 2000). Prototypical hunting, or an ideal hunting scenario, seems to involve the pursuit of spider monkeys. *Uli jkwayo* is the key protagonist in more than one mythological account. He is responsible for cutting down the “tree of life” (*jkwě jtawĩ jkajka*), which provided cultivated products. He seduced humans to sing animal songs that induced the transfiguration of people to animals. He created the *waña* as a physical connection to reaffirm organic wholeness. Moreover, the spider monkey is, of all neotropical mammals, the closest in appearance and action to humans. Therefore, *uli jkwayo* is represented as a being “too human” to be just an animal and too animal to be human. Clever and mischievous, crafty and liberal, competent and useful, the spider monkey embodies a recurrent human/animal motif in the multilayered universe of the Jotĩ. While lacking a rigid morality or purpose, the mythological accounts of *uli jkwayo* support the flexible and fluid daily happenings of Jotĩ hunters.

CONCLUSIONS

In this essay I have endeavored to show that hunting among the Jotĩ is not just a pragmatic food-getting activity involving the mere capture of wild animals using a relatively simple toolkit. Beyond the sophistication and beauty of the ecological knowledge and technical skills employed by the Jotĩ to track, spot, shoot, and capture prey, their knowledge is articulated through a complex and elaborate, multilayered

ideology. Jotĩ hunting ideology explains and provides deeper meanings (e.g., social, moral, spiritual), structural connections among differentiated but potentially changeable elements (e.g., humans as predator or prey, or inductor, see Århem 1996b), and higher purposes (e.g., re-creation of the world, avoidance of the total annihilation of the present era, and replenishment of animal populations) that shape the totality of hunting practices. Indeed, through an ideological prism it is possible to grasp hunting as an entire lifeway, with a particular ethos and dynamic for reproducing the material realm and social behavior. A hunter's insights and performances are shaped by such seemingly disparate notions as death and afterlife, personhood, the ontological equivalence of people and animals, the norms and ethics of social life, the organic makeup of animals, and life-cycle rituals. Hunting, as conceived (and practiced) by the Jotĩ, is a uniquely human expression of life and living among many other sentient beings. It is the way of connecting meaningfully to the totality of reality.

The Jotĩ ontological conception that people and animals are behaviorally equivalent is an essential element of hunting ideology. Once a Jotĩ woman knows that an *ijkwō ju* is growing in her womb, she and the father begin observing a set of avoidance taboos that limit contacts with some animals and restrict the eating of many wild foods. This is done not just to prevent individual and social transgressions or retributions and punishment (diseases, death), but also to prevent eating beings such as humans or triggering transformations of prey into predators. Food taboos and avoidance of the spaces of potential predators are accentuated throughout one's life, in order to promote hunting habits that help to enhance effective communication with, and success in the capture of prey. Training of individual *jnamodĩ* and *inē ja dodo* increase the capacity to interact and communicate with the animal's *jkyo aemodĩ* and other powerful beings. Jotĩ hunting practices seem to permeate and articulate the most fundamental spheres of social dynamics, both in ideological and material domains. My studies indicate that to be a successful hunter among the Jotĩ techno-ecological and naturalistic wisdom is just as important as shamanic knowledge. Jotĩ hunting is a complex system of management that employs multirelational modes of predation and multiple layers of reciprocity. In Jotĩ society, both men and women can be hunters and men and women can also be shamans (cf. the Parakanā in Fausto 1999). Hunting practices articulate with most spheres of social life. Jotĩ social organization exhibits a clear tendency towards a diffuse or homogeneous distribution of power, as opposed to concentration of power in one or a few shamans. This sociopolitical characteristic, expressed in the basically egalitarian, nonspecialized form of Jotĩ shamanism (see Storrie 2003), is similar to the

Guajá, but in the Jotĩ case women are included (cf. Cormier 2003a). All hunters and shamans have the ability to undergo morphological change (or metamorphosis) in order to affect the relationship between human and nonhuman beings. They exhibit a generalized ability to adopt a multiplicity of viewpoints. Hunters act as administrators of their relationships with the diverse animal populations that are hunted. It is recognized that their behavior and performance may in turn affect all the other hunters of their group. Each hunter acts as a human intermediary with the divine intangible world. They can engage in discourse with the spirits, a form of mediated communication through the *jnamodĩ* of all the diverse beings. Such interactions modulate outcomes and create responsibility through agency.

In the predation of Jotĩ hunting, there are at least three interaction spheres that are empirically recognized, as well as variably interpenetrated and interconnected to each other: (1) “tangible material,” (consisting of physical space, hunting tools, particular botanical and zoological species); associated to (2) “intangible material,” (consisting of techno-ecological, phenological and ethological knowledge); and a robust (3) “ideological-symbolic body,” (consisting of myths, songs, premonitions, dreams). Such spheres have concrete sociobehavioral expressions (spear and blowgun hunting, couple hunting, party hunting, et cetera) and individual-corporeal expressions (body painting, hunting magic, et cetera). Hunting episodes, in individual or social circumstances, are inserted in diachronic and synchronic historical transformations: each hunting event reproduces the success of the primordial hunt, in essence if not in fact. Thus, Jotĩ hunting can be understood as an interconnected configuration (e.g., between technology, biosphere, ideology, ecology, et cetera), which is articulated through representational bodies of praxis and ideas (e.g., through cosmology, hunting magic and *jkyo aemo*). Following Viveiros de Castro’s meaning, what I believe is the essential relationship of Jotĩ “perspectivism” is archetypically and persistently expressed through the acts of predation in everyday hunting, and it is condensed in the representations, meanings, and actions of commonplace hunters or “hunter-shamans” (cf. Viveiros de Castro 1998:14; 2003:199; Descola 1996:90). Jotĩ perspectivism involves engagement of different interaction spheres located in the human body and it stipulates the enormous importance attributed to the role of the hunter as the most responsible human position in the universe amongst sentient beings.

NOTES

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1. A longer and more comprehensive manuscript of Joti hunting practices, including broadly technoecological and material aspects, was written two years ago. Those readers interested can request a copy from the author.

2. Hunting tools include: (1) *jwana*—blowgun (*Arthrostylidium* spp., *Rhipidocladum* spp., *Chrysoclamys membranacea*, *Schefflera morosotoni*, *Couma macrocarpa*, and *Guayania cerasifolia*, which are believed to transfer their properties and connectivity powers to the gun, which enhances the user's ability to capture game); (2) *jwaeye jele*—darts (leaf midribs and petioles of palm species, *Attalea macrolepis*, *A. maripa*, *A. sp.*, *Oenocarpus bacaba* and *Mauritia flexuosa*; (3) *yaya jele*—noose traps (*Attalea* spp., *Oenocarpus* spp., *Euterpe* spp., *Geonoma* spp., *Mauritia* spp., *Phenakospermum guyannense*, etc.); (4) *lujkuwi*—lance (thin trunks of a variety of tree species: *Himatanthus articulatus*, *Odontonema bracteolatum*, *Duguetia* sp., *Socratea exorrhiza*, *Tetragastris altissima*, *Parinari excelsa*, *Brownea coccinea*, *Brosimum* sp., *Virola elongata*, *Ouratea castaneifolia*, *Coccoloba fallax*, *Voshysia ferruginea*, *Phthirusa pyrifolia*); (5) *malawa*—curare (*balawa ju Strychnos* spp., secret plants); (6) known but little or not used *nemala*—bow (*Centrolobium* sp., *Astrocaryum* sp., *Euterpe* spp., *Apuleia* spp., and *Ecclinusa guianensis*).

3. "*Ijkwö ju*" also embodies the human essence in the sense of providing subjectivity and sensibility, and comes from both parents, as does the *inè ja dodo*, literally the "physical body." See López 2006 for a fuller explanation of these terms.

4. The Joti conception of personhood is rich and complex (see López 2006). Translations are approximate.

5. The wooden plugs in question are not visible and are never seen when interacting with the Joti. Among the preferred wood plants used are *jtuliwedi jele* (*Rinorea pubiflora*), *jkwaïjle jtarwi* or saki monkey tree (*Licania apetala*), *waiyo jyei* (*Pseudolmedia* spp), and *jali bajte ji* (*Oenocarpus bacaba*).

6. A cosmogonic explanation for the total extinction of an individual is given by the Joti if they are prompted to describe what happens when a person whose nose was never pierced dies. This is an issue beyond the scope of this paper.

7. No scientific names of the plants suspected to have bioactivity or those involved in hunting magic are provided here. My reluctance to provide such

information is due to the culturally sensitive and spiritual nature of these species, as well as to the economic and marketing potential of Joti botanical knowledge and the pharmaceutical properties of their plants. It is an ethical obligation to protect their human rights and their intellectual property rights. The most commonly Joti taxa used for this purpose include: *uli jkwayo waiye yakino*, *jwali iku jkwajtoko jyei*, *ijkyeka waleba jyei*, *jkwaijle jtarwi*, *abiye jtarwi*, *jkamaya kweto jyei*, *uli iye jyei*, *jolejte alarwini jyei*, *kyieko jtarwi*, *uli jtijti jyei*, *jkwayo jtu jele*, *jtibebo jyei*, *uli jkarwile jyei*, etc. Seven cultivated species were also recorded (*jwoli tuku jya*, *alilu jtu ki jwajwa*, *jkwayo balo aye*, *uli jkalawine jkojko*, *jkojko lidibibi* and *buleine jkojko*).

8. It is preferred to practice hunting magic after the nose has been pierced, but some hunters reported the use of medicinal-magic plants and fungi before their noses were pierced.

9. The richness and length of the ontogenetic and cosmogonic myths will be the subject of another paper. Therefore only the basic elements pertinent for discussion are mentioned here.

10. According to which group a speaker belongs, the tree mentioned in the creation myth can vary: *jtijtimo jyei* (*Apeiba* spp.); *luwe jyei* (*Inga* spp.); or *jkwiwi jyei* (*Caraipa* spp.).

11. The domesticated *Musa* genus—plantains and bananas (*Musa x paradisiaca*)—was introduced or reintroduced less than 500 years ago from Southeast Asia, which attests to the agility of cultural processes not requiring antiquity to be meaningful or traditional. *Musa* and *Apeiba* are made up of diverse species and varieties, just as the human diversity that was later generated.

12. The “doctrine of signatures” was formulated in the sixteenth century by the Swiss herbalist, Paracelsus. Its basic premise alleges that the sensual-morphological features of plants (shape, color, smell, taste, et cetera) provide hints for humans to perceive their healing properties, and most significantly that God explicitly made those characteristics as easy signs for humans to perceive.

13. *Jkali* (squirrel), *jkwajtubo* (deer), *yewo* (tapir), *jkawiye* (peccary), *uli jeme* (porcupine), *uli bole* (vulture), and *jkamaya* (macaw) do not have *waña*.

14. The plant species most commonly used for this purpose include: *nin jtokolo jyei* (*Himatanthus articulatus*), *tuwewe balu jkojko* (*Zingiber* sp.), *jkjo jetö jkulilu jyei* (*Bixa* sp.), *awëla malu jyei* (*Protium aracouchini*), *malana jyei* (*Copaifera officinalis*), *uli malu jyei* (*Trattinnickia lawrancei*), *malu jyei* (*Trattinnickia burserifolia*), *jalil malu jyei* (*Protium crassipetalum*), *ojtewaka mau jyei* (*Protium tenuifolium*), *tuwili jyei* (*Mabea* sp.), *jtawe jyei* (*Garcinia* sp.), *ijkoba luwe* (*Hibiscus abelmoschus*), *wajlikye jyei* (*Ecclinusa guianensis*), et cetera.

15. Recently a young man made a self-initiated and unsupervised attempt to learn the art of dreaming, with rather unsuccessful and near-tragic results. Allegedly he will never recuperate his self again, even after a month of treatment in a hospital, and is still mentally impaired by the plant bioagents that he took.

16. This is similar to the conceptual equivalence that the Ese Eja people make between dream/know/see/get (cf. Peluso 2004).

17. The sequence of phonemes and phrases making up the song are pronounced so quickly and staccato-like that my attempts at complete or accurate transcriptions

were difficult for me to accomplish. Due to the complex cultural nature of the lyrics and meanings being expressed, any attempt to translate precise meanings in western terms would probably be an exercise of limited use.

18. The most important animals hunted are: tapir, white-lipped peccary, spider monkey, weeping capuchin monkey, brown bearded saki, titi monkey, night monkey, paca, agouti, kinkajoo, southern tamandua, black currawong, green-and-red macaw, trumpeter, spix's guan, blue throated guan, and Cuvier's toucan (for details see E. Zent 1999).

19. This is a polysemic expression that means to hunt, fish, gather, explore, go out, walk, exploit, and browse around in the forest, although in most cases, hunting is the main connotation of the phrase.

20. The man's name, Jani-yewi, was given to the woman. She had no known name before marriage, but after the marriage she was called Jani-yewi aun ("the mate, companion female of Jani-yewi"). For purposes of brevity, I will refer to her as "Aun" in the text.

21. Although everyone receives a share of the prey captured, the cutting, distribution and allocation of the meat throughout the community members implies very complex sharing patterns among one's kin network (especially with the *ji* and *jlurwēna* of the hunter) and transcends the goal of this paper.

22. Lack of space prevents me from recounting more hunting memories, which would further illustrate the use of plants and fungi as hunting tools in both a spiritual and a material sense, e.g., the use of plants as phytoindicators of game or as hideouts in hunting outings, the use of fire to trap rodents, the use of traps to capture birds, or the complexities and beauty of body paints, et cetera.

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ORTHOGRAPHY/ALPHABET (prepared by Stanford Zent)

All of the Jotĩ language words that appear in the text were written using the alphabet that was developed and adopted by the Jotĩ community at San José de Kayamá. It is the result of two workshops held in Kayamá in April 2002 and October 2005 involving the participation of about 25 members of the community (mostly school teachers and elders), along with Stanford Zent and Father Marcelo Quatra. It is a phonemic-based alphabet in the sense that each letter or combination of letters corresponds to a phoneme, or minimal sound unit that contrasts meaning, in the language. It consists of 18 vowels (i, i, ĩ, e, e, ẽ, a, a, ä, o, o, ö, u, u), 19 consonants (b, d, j, jk, jky, jl, jn, jñ, jt, jw, jy, k, ky, l, m, n, ñ, w, y), and one suprasegmental character (´). All of the characters are roughly equivalent in sound symbolism to their use in Spanish, with the following exceptions: underlined vowels are nasalized; i is high mid/back unrounded; ẽ is open-mid front unrounded; ä is open-mid back unrounded; ö is open-mid back rounded; j before another consonant refers to coarticulated aspiration with a preaspirated tendency; jky is preaspirated voiceless palatal occlusive; and ky is voiced palatal occlusive.

GLOSSARY

(approximate translations of some Jotĩ words that appear in the text):

aburwi dumẽ wẽ dẽkae: dreams

aemo (sing.) *aemodĩ* (pl.): invisible transcendent spiritual self of animals

aiye: leaves

anene yede: stinger (of anthropods or other animals)

au diti: partial or total body baths see *au ibi*

au ibi: partial or total body baths *au diti*

au iño jkwa lamau: inhalations

au jkwan: concoctions, libations

au wae: libations

awẽla: polysemic term. A bad material spirit. A mischievous complex conglomerate of individuals that agglutinate undifferentiated evil and feared entities. Awẽla are polymorph predators that differ in their temporality: hypostatic (profusely hairy huge black tall persons), eternal (left buried in the underground after the last chaos) or finite ones (transformation of laziness, disease, pain of the death).

- baede joti baede jarwa*: the old ways/lifestyle of the ancestors
bajtu jono jyei dodo: bark cloth from *Lecythis corrugate* tree
dale: seed
ejkajka: spicy, bitter
ijko ño jkwa ili: piercing the nasal septum (see *ñona jkane*)
ijkwō ju: literally ‘heart’; embodies the human essence, provides subjectivity and sensibility
ijti: scorpion
imo: tiny red stinger ant
inē ja dodo: literally the ‘physical body’, allows one to perceive, think, move, inhabit the sensed space
inējkō: hoofprint or footprint, see also *jkana inī*
ineyodi: bullet ants [24-ant], a big, hard, black ant whose powerful sting produces a 24-hour fever
inijtile: hunting magic applied with the stated objective of inducing the big animals to stray across the hunter’s path
iyudi: objectification of the food through an oral blessing
jani jtijti jyei: little bitter bark tree
ji: affinal kinship term
jkadi jadi: giver-beings
jkajo jadi: shamans, sage, primordial light ones
jkali: squirrel
jkalideki: skin painting see *malurwe durwideka*
jkamaya: macaw
jkamaya aemo: macaw protector spirit
jkana inī: hoofprint or footprint, see also *inējkō*
jkawiyē: peccary
jkēmabakā: old expression to refer an original powerful hypostatic being also called *jlae* and/or *jkyo ae*
jkwajlebo mojtodi: inner cartilages of many fish
jkwajtaka: inner wood of certain tree trunks sensitive inner core of the tree trunk
jkwajtubo: deer
jkwayo ju dobabi: shooting monkeys
jkwē jtawī jkajka: the tree (stump) of life
jkwiī aemo: piping guan protector spirit
jkyo ae: a powerful primordial being see *jlae*
jkyo aemo (sing.) *jkyo aemodī* (pl.): spiritual beings, protectors or ideal beings “masters of animals”
jkyo aemo nurwei: master of the animal’s home or homestead
jkyo balebi: polysemic expression that means to hunt fish, gather, explore, and browse in the forest
jkyo nima jadi: the people that belongs to the howler monkey’s group
jkyo waña yakino: sprouting mushroom on rotten logs in the forest see *uli jkwayo waña yakino*
jlae: hypostatic powerful primordial being, also called *jkyo ae*
jlurwēna: affinal kinship term
jnamodī: spiritual selves, souls, animus. They are invisible and nontangible components of human beings that facilitate reason, volition, knowledge, sensibility, and health. Every Jodī has three or more *jnamodī*, each with particular intentionality and its own dynamics.
jnekwa: the underworld
jobei: songs
jtajwibo: flutes

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- jtaujkurwē kwa ma jadī*: forest animals
jtijae: good, healthy, beautiful, fine, nice
juluwejte: strong
jwaeje jele: darts
jwana: blowgun
jyē: black army ant
kyabo jyu ijkwō ju jkwama jarwa: malodorous white liquid extracted from the heart of some animals (tapir, spider monkey, peccary)
lujkwū: lance
malarwa: curare
malu jnagna: resins
malurwe durwidekae: skin painting see jkalidekī
malurwe man: cultural festivities
mu abo: wasp's hives
mu inimo: little wasp pupae
mu jadī: wasps
ñaña jele: noose traps
nimo: tiny red stinging ant
nimō: the howler monkey *Alouatta seniculus*
nīn aburwi dumē we dekae: real dreaming
nīn Jodī: the true humans (the real people) to manufacture and use blowguns
ñona jkane: piercing the nasal septum, see *ijko ño jkwa ilī*
nuwei: house, home
ojtejte jyu: liver or liver's fluids
ulī bole: vulture
ulī inēdī: bullet ants
ulī jeme: porcupine
ulī jkamaya: big macaw, *Ara chloroptera*
ulī jkwayo: the spider monkey, *Ateles belzebuth belzebuth*
ulī jkwayo aemo: spider monkey protector spirit
ulī jkwayo jtu jele: spider monkey's head treelet
ulī jkwayo waña ñakino: sprouting mushroom on rotten logs in the forest, see *jkwo waña yakino*
ulī yerwā: tapir
ulī yerwi aun: jaguar's female companion skilled hunter
ulī yorwale: big opossum
waiye bo jtajwibo: small cane-vial made out of *Guadua* spp.
walejte najna: ash preparations to dye the bodies
waña: likely bilic secretions of the spleen or liver
wejtowa anene: urticating caterpillar hairs
wejtowa jadī: urticating caterpillars
yerwō: tapir